

10th Class 2021

Physics	Group-II	Paper-II
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

- 1-1- Which of the gate is used to convert one logic level into opposite logic level?
(a) AND gate (b) OR gate
(c) NOR gate (d) NOT gate ✓
- 2- How will be electric lines of force where intensity of electric field is maximum?
(a) Wider (b) +ve to -ve
(c) Narrow ✓ (d) -ve to +ve
- 3- If the current in a wire which is placed perpendicular to a magnetic field increases, the force on the wire:
(a) Will be zero (b) Remains the same
(c) Decreases (d) Increases ✓
- 4- In which state of matter longitudinal waves move faster?
(a) Liquid (b) Solid ✓
(c) Gas (d) Liquid and gas
- 5- Isotopes of hydrogen are:
(a) 2 (b) 3 ✓
(c) 4 (d) 5
- 6- Speed of sound in hydrogen at 0°C is:
(a) 1290 ms⁻¹ ✓ (b) 972 ms⁻¹
(c) 1498 ms⁻¹ (d) 317 ms⁻¹

- 7- Which of these is not a web browser?
(a) Youtube ✓ (b) Chrome
(c) Mozilla firefox (d) Safari
- 8- The refractive index of medium is equal to:
(a) $n = \frac{1}{cv}$ (b) $n = \frac{v}{c}$
(c) $n = cv$ (d) $n = \frac{c}{v}$ ✓
- 9- The image formed by convex mirror is:
(a) Real and erect (b) Inverted and real ✓
(c) Erect and virtual (d) Inverted and virtual
- 10- One micro ampere is equal to:
(a) $10^{-3}A$ (b) $10^{-6}A$ ✓
(c) $10^{-9}A$ (d) $10^{-12}A$
- 11- According to Coulomb's law, what happens to force of attraction of two oppositely charged objects as their distance of separation increases:
(a) Decreases ✓
(b) Increases
(c) Remains unchanged
(d) Cannot be determined
- 12- In parallel combination of resistors, each resistor will have the same:
(a) Resistance (b) Voltage and current
(c) Voltage ✓ (d) Current